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**RECEIVED E-Mail****March Monthly Clay Hollow Cleanup Update****MAR 15 2016**

1 message

**Div. of Oil, Gas & Mining****Heaton, Trevor (RTKC)** <Trevor.Heaton@riotinto.com>

Mon, Mar 14, 2016 at 5:14 PM

To: 'Paul Baker &lt;PAULBAKER@utah.gov&gt;

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Mr. Baker

Attached are the monthly update report and inspection sheets associated with the Clay Hollow Cleanup Project (2/16-3/16). No changes have occurred since the previous monthly report. The Clay Hollow Post-Removal Report was approved by DOGM in early August, however the review and approval by other participating agencies are still in process.

Attached to this email are the Clay Hollow Cleanup Tracking Sheet and the associated daily inspection logs. If you have any questions feel free to contact me.

Regards,

Trevor Heaton, P.E.

Senior Project Engineer

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Table 1 Cleanup Response Activities

ID	Work Area	Activity	Planned Target		Status	Comments
			Start	Finish		
1A	Segment 1	Additional sampling on the West Jordan property	4/1/2014	5/16/2014	Complete	The distribution of mine waste sediment shall be based on visual observation, XRF analysis of soils for arsenic and lead, and laboratory analysis on select confirmation samples for arsenic and lead.
1B	Segment 1	Draft a Characterization/Removal work plan	4/1/2014	4/17/2014	Complete	Plan provided as dictated in the DOGM Division Directive
1C	Segment 1	Site visit with DWQ, DOGM and DERR	4/9/2014			Allow regulators an opportunity to see the site in person and ask questions.
1D	Segment 1	Regulatory review of Cleanup Plan - Segment 1	4/18/2014	4/30/2014	Complete	Submission of joint review between the three agencies
1E	Segment 1	Obtain comments from DOGM, DWQ and DERR	4/22/2014	4/30/2014	Complete	Obtain comments from the agencies on Cleanup plan
1F	Segment 1	Revise work plan and address Agencies comments	4/22/2014	5/14/2014	Complete	Resubmittal for joint review between the three agencies
1G	Segment 1	Obtain Regulatory approval of Cleanup Plan - Segment 1	4/21/2014	7/3/2014	Complete	Regulatory approval of recommended action levels for arsenic, excavation and removal of material, transportation of material, final deposition of removed material, and restoration of the drainage.
2A	Segment 1	Increase desilting capacity at the Kennecott property line	7/7/2014	7/8/2014	Complete	Initial step is to prevent additional mine waste sediment from migrating off Rio Tinto property.
2B	Segment 1	Remove sediments from - Segment 1	7/9/2014	7/15/2014	Complete	The removal of mine waste sediment will commence just downstream of the desilting basins that are to be constructed. From this point the removal will continue downstream to the property line, thus preventing further migration of mine waste sediment off of Rio Tinto property.
1F	Segments 2-4	Submission of Cleanup plan for - Segments 2 - 4	7/18/2014	11/20/2014	Complete	Plan provided as dictated in the DOGM Division Directive.
2C	Segment 1	Reconstruct riprapped channel in - Segment 1	9/15/2014	9/23/2014	Complete	Replacement of riprap material will be further protect the stream bottom from erosion and restore the site to its previous condition.
1G	Segments 2-4	Obtain Regulatory approval of work plan	12/19/2014	12/19/2014	Complete	Regulatory approval of recommended action levels for arsenic, excavation and removal of material, transportation of material, final deposition of removed material, and restoration of the drainage.
2D	Segment 1	Reseed impacted areas in - Segment 1	9/23/2014	9/23/2014	Complete	Revegetating immediately downstream of the desilting basins will minimize offsite migration of fines during a storm event.
3A	Segments 2-4	Remove sediments from - Segments 2-4	7/21/2014	9/11/2014	Complete	Removal of sediments found upstream of the desilting basins will minimize the loading and the maintenance of the basins.
3B	Segments 2-4	Reconstruct drainage channel - Segments 2-4	7/28/2014	11/26/2014	Complete	Regrading of the disturbed area will allow for natural water flow and will be done concurrent with removal.
3C	Segments 2-4	Reseed impacted areas in - Segments 2-4	11/18/2014	11/26/2014	Complete	Revegetation of the drainage found upstream of the desilting basins will minimize the loading and the maintenance of the basins.
4A	Segments 1-4	Submit post removal report	11/27/2014	2/6/2015	Complete	Detailed report giving removal quantities as well as the test results of the cleaned surface. - This work is in process and progressing on time.
4B	Segments 1-4	Obtain Regulatory approval of post removal report	2/6/2015		In Process	Regulatory approval of the post removal report
4C	Segments 1-4	Inspect leach pads and stormwater controls daily until permanent controls are installed	4/1/2014		In Process	Includes daily inspection of all five leach pads and the associated stormwater controls until approval is obtained to decrease the frequency

**Projected dates**

\* Monthly project updates will be provided on the 15th of each month, until the cleanup is complete. If Barneys deviates from the attached schedule, Barneys and Agencies will discuss any needed action at the agencies request.

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## Barneys Canyon Heap Pad and Drainage Inspection

Month: February 2016

Date	BC1	BC2	BC3	BC4	BC5	North Perimeter	South Perimeter	East/B&G Perimeter	Inspector	Comments/Corrective Actions
1	-	-	-	-	-	-	-	-	TMN	No inspection due to safety concerns w/ snow
2	1	1	1	1	1	1	1	1	TMN	Site stable - limited inspection due to snow pack
3	1	1	1	1	1	1	1	1	TMN	Site Stable - limited inspection due to snow pack.
4	1	1	1	1	1	1	1	1	TMN	Site stable. Limited inspection due to snow pack.
5	1	1	1	1	1	1	1	1	TMN	Site Stable. Limited inspection due to snow pack.
6	-	-	-	-	-	-	-	-	TMN	weekend - no inspection
7	-	-	-	-	-	-	-	-	TMN	weekend - no inspection
8	1	1	1	1	1	1	1	1	TMN	Site Stable. Snow packed roads.
9	1	1	1	1	1	1	1	1	TMN	Site Stable. Snow packed roads.
10	1	1	1	1	1	1	1	1	TMN	Site Stable. Snow packed roads.
11	1	1	1	1	1	1	1	1	TMN	Site stable. Snow packed & slushy roads.
12	1	1	1	1	1	1	1	1	TMN	Site stable. Snow packed & slushy roads.
13	-	-	-	-	-	-	-	-	TMN	weekend - no inspection
14	-	-	-	-	-	-	-	-	TMN	weekend - no inspection
15	1	1	1	1	1	1	1	1	TMN	Site stable. Thaw is under way
16	1	1	1	1	1	1	1	1	TMN	Site Stable. Thaw continue. Only N side Pad 39.5 still drifted.
17	1	1	1	1	1	1	1	1	TMN	Site Stable. Thaw continues.
18	1	1	1	1	1	1	1	1	TMN	limit inspection, blizzard conditions. Site Stable
19	1	1	1	1	1	1	1	1	TMN	Site Stable. Thaw continues
20	-	-	-	-	-	-	-	-	TMN	Weekend - no inspection
21	-	-	-	-	-	-	-	-	TMN	Weekend - no inspection
22	1	1	1	1	1	1	1	1	TMN	Site Stable - fresh snow but melting fast.
23	1	1	1	1	1	1	1	1	TMN	Site Stable. Thaw continues
24	1	1	1	1	1	1	1	1	TMN DH	Site Stable.
25	1	1	1	1	1	1	1	1	TMN	Site Stable.
26	1	1	1	1	1	1	1	1	TMN	Site Stable.
27	-	-	-	-	-	-	-	-	TMN	No inspection - Weekend
28	-	-	-	-	-	-	-	-	TMN	No inspection - Weekend
29	1	1	1	1	1	1	1	1	TMN	Site stable
30										

## Heap Leach Pads (BC1 thru BC5):

- 1 No heap material or liquids flowing off the lined pad
- 2 Heap material flowing off the lined pad
- 3 Liquids flowing off the lined pad

## Perimeter Drainage:

- 1 Perimeter drainage in good order and containment of storm water behind permitted dams
- 2 Uncontained perimeter drainage
- 3 Moderate to significant erosion to perimeters

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1	1	1	1	1	1	1	1	1	TMN	Site Stable
2	1	1	1	1	1	1	1	1	TMN	Site Stable
3	1	1	1	1	1	1	1	1	TMN JB DH	Site Stable
4	1	1	1	1	1	1	1	1	TMN	Site Stable
5	-	-	-	-	-	-	-	-	TMN	Weekend - no inspection
6	-	-	-	-	-	-	-	-	TMN	Weekend - no inspection
7	1	1	1	1	1	1	1	1	TMN	Site Stable. Culinary line leak S. Pad 4
8	1	1	1	1	1	1	1	1	TMN	Site Stable. Leak isolated.
9	1	1	1	1	1	1	1	1	TMN	Site Stable. Repairs to pipeline underway
10	1	1	1	1	1	1	1	1	TMN	Site Stable. Pipe repairs complete.
11	1	1	1	1	1	1	1	1	TMN	Site Stable.
12	-	-	-	-	-	-	-	-	TMN	Weekend - no inspection
13	-	-	-	-	-	-	-	-	TMN	Weekend - no inspection
14	1	1	1	1	1	1	1	1	TMN	Site Stable
15										
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